

CLAIMS

1. **ARRANGEMENT INTRODUCED IN A HIDDEN RECEIVER-SENDER DELIMITER FOR PNEUMATICS AND SIMILARS**, notably of a conventional transponder (T) for the emission and reception of radio frequency (RF) signals
5 composed by a chip (1) and a coil reel (2), characterized by covering, in its full construction, i. e. including chip (1) and the coil reel (2) from the use of a plastic film (F), said transponder (T) thus covered, being introduced between the male (4) and female (5) portions of a capsule (3) provided with a compact base (6) giving origin to the equally compact side (7) forming a smooth end rim (8), so
10 that the internal wall of that side configures a small straight path (9), distal from the compact base (6), followed by a "V" shape deepening (10) and the latter by a retracted bottom housing (11) which has its width limited by a ring wall (12), which height extends up to about the vertex of the mentioned "V" deepening (10), with said ring wall (12) having a bevel (13) on the side of the male portion
15 (4) and rounding (14) on the side of the transponder (T); the bottom (15) of that compact base (6) is located at a level above the retracted bottom (11); the male portion (4) discloses a compact top (16), which diameter is substantially compatible with the straight path (9) of the female portion (5), with said top (16) incorporating a corresponding straight path (17) followed by a projection
20 substantially in "V" (18) which is coupled and fits under relative pressure to the deepening in "V" (10), while an equally ring-shaped rim (19) is settled over the retracted bottom (11), so to be restrained by the ring wall (12); the male (4) and female (5) portions become fitted between them under considerable pressure; between the bottom (15) of the compact base (6) and the maximum height of

the ring wall (12), coinciding with the bottom (20) of the compact top (16), a chamber (21) is created, inside which the transponder (T) is housed, with a diameter adjustment existing in said chamber very near to the internal diameter of the ring wall (12).

5 **2. ARRANGEMENT INTRODUCED IN A HIDDEN RECEIVER-SENDER DELIMITER FOR PNEUMATICS AND SIMILARS** of claim 1, in which the chamber (21) has dimensions to allow the previously covered transponder to fit under pressure, forming smooth arching determining a "spring" effect having the purpose to avoid the transponder to absorb vibration, as well as the random
10 balance inside said capsule and, in case of huge twisting or impact over the capsule (3), the transponder (T) does not happen to deform.

3. **ARRANGEMENT INTRODUCED IN A HIDDEN RECEIVER-SENDER DELIMITER FOR PNEUMATICS AND SIMILARS** of claims 1 and 2, which is employed in aggressive chemical or mechanical means, with no prejudice to the
15 functions of the transponder (T), since it presents double protection; the first one from the cover by the plastic film or similar (F), immersion or any other form allowing said resource and being able to quickly dry chemical and mechanical insulation; and the second one through the capsule (3) made of transparent material to electromagnetic waves and appropriate to resist against various
20 mechanical efforts, be them twisting, flexion, traction or even mechanical vibrations, being the employed material preferably a polycarbonate provided not only with transparency to electromagnetic waves, but also relative flexibility.

4. **ARRANGEMENT INTRODUCED IN A HIDDEN RECEIVER-SENDER DELIMITER FOR PNEUMATICS AND SIMILARS** of claims 1 and 3, in which

the first protection, i. e. covering, allows the transponder (T) to respond, in a fully efficient way, to the use in naturally aggressive chemical means, including acids.

- 5. ARRANGEMENT INTRODUCED IN A HIDDEN RECEIVER-SENDER
DELIMITER FOR PNEUMATICS AND SIMILARS** of claims 1 and 2, in which the second protection, i. e. encapsulation, consists of the introduction of the transponder inside a capsule (3) in transparent material to electromagnetic waves and appropriate to resist against various mechanical efforts, such as those occurring inside a tire.
- 10 6. ARRANGEMENT INTRODUCED IN A HIDDEN RECEIVER-SENDER
DELIMITER FOR PNEUMATICS AND SIMILARS** of claims 1, 2 and 5, in which the chamber (21) has dimensions to allow the previously covered transponder to fit under pressure, forming smooth arching determining a "spring" effect having the purpose to avoid the transponder to absorb vibration, as well as the random balance inside said capsule and, in case of huge twisting or impact over the capsule (3), the transponder (T) does not happen to deform.